What is claimed is:

1. A process for fermentatively preparing an L-amino acid, which comprises the steps of:

a) fermenting microorganisms of the *Enterobacteriaceae* family which produce an L-amino acid and in which at least poxB gene or nucleotide sequences which code therefor are attenuated or eliminated;

b) concentrating the L-amino acid in the medium or in the cells of the bacteria; and

c) isolating the L-amino acid.

2. The process of Claim 1, wherein said L-amino acid prepared is L-threonine, L-valine, L-lysine, L-isoleucine, L-methionine, or L-homoserine.

3. The process of Claim 1, wherein said microorganisms have additional genes of the biosynthesis pathway of the L-amino acid additionally enhanced.

4. The process of Claim 1, wherein said microorganisms have metabolic pathways which reduce formation of the L-amino acid which are at least partly eliminated.

5. The process of Claim 1, wherein expression of the polynucleotide(s) which code(s) for the poxB gene is attenuated or eliminated.

6. The process of Claim 1, wherein regulatory or catalytic properties or both of the polypeptide for which the polynucleotide poxB codes are reduced.

7. The process of Claim 1, which comprises fermenting, for the preparation of the L-amino acid, microorganisms of the *Enterobacteriaceae* family in which one or more genes selected from the group consisting of:

1) the thrABC operon which codes for aspartate kinase, homoserine dehydrogenase, homoserine kinase and threonine synthase,

2) the pyc gene which codes for pyruvate carboxylase,

3) the pps gene which codes for phosphoenol pyruvate synthase,

4) the ppc gene which codes for phosphoenol pyruvate carboxylase,

5) the pntA and pntB genes which code for transhydrogenase,

6) the rhtB gene which imparts homoserine resistance,

7) the mqo gene which codes for malate:quinone oxidoreductase,

8) the rhtC gene which imparts threonine resistance,

9) the thrE gene which codes for threonine export, and

10) the gdhA gene which codes for glutamate dehydrogenase, is or are enhanced at the same time.

8. The process of Claim 7, wherein said one or more genes are over-expressed.

9. The process of Claim 1, which comprises fermenting, for the preparation of L-amino acids, microorganisms of the *Enterobacteriaceae* family in which one or more genes chosen from the group consisting of:

1) the tdh gene which codes for threonine dehydrogenase,

2) the mdh gene which codes for malate dehydrogenase,

3) the gene product of the open reading frame (orf) yjfA,

4) the gene product of the open reading frame (orf) ytfP, and

5) the pckA gene which codes for the enzyme phosphoenol pyruvate carboxykinase,

is or are attenuated at the same time.

10. The process of Claim 9, wherein said one or more genes are eliminated or reduced in expression.

11. The process of Claim 2, wherein said L-amino acid is selected from the group consisting of L-threonine, L-valine and L-lysine.

12. The process of Claim 1, which comprises employing, for the preparation of L-threonine, strain MG442ΔpoxB transformed with plasmid pMW218gdhA, shown in figure 2.

13. The process of Claim 1, which comprises employing, for preparation of L-threonine, strain MG442ΔpoxB transformed with plasmid pMW219rhtC, shown in figure 3.

14. The process of Claim 1, which comprises employing, for preparation of L-lysine, strain TOC21RΔpoxB.

15. The process of Claim 1, which comprises employing, for preparation of L-valine, strain B-12288ΔpoxB.

16. A microorganism of the *Enterobacteriaceae* family which produces an L-amino acid, in which poxB gene or nucleotide sequences coding therefor are attenuated, or eliminated, and which have resistance to α-amino-β-

hydroxyvaleric acid and optionally a compensatable partial need for L-isoleucine.

17. *Escherichia coli* K-12 strain MG442ΔpoxB deposited at the Deutsche Sammlung für Mikroorganismen und Zellkulturen (DSMZ = German Collection of Microorganisms and Cell Cultures, Braunschweig, Germany) under no. DSM 13762.

18. Plasmid pMAK705ΔpoxB, which comprises parts of the 5' and of the 3' region of poxB gene, corresponding to SEQ ID No. 3, shown in figure 1.

19. Plasmid pMW218gdhA shown in figure 2.

20. Plasmid pMW219rhtC shown in figure 3.

21. An isolated polynucleotide from microorganisms of the Enterobacteriaceae family, containing a polynucleotide sequence which codes for the 5' and 3' region of poxB gene, shown in SEQ ID No. 4, which is capable of being used as a constituent of plasmids for position-specific mutagenesis of poxB gene.

22. A strain of the *Enterobacteriaceae* family which produces L-threonine and contains a mutation in the poxB gene, corresponding to SEQ ID No. 4.